



Research Article

Classroom teachers' self-efficacy regarding gifted education

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Abstract

The aim of the study is to examine the self-efficacy of classroom teachers towards gifted education in terms of different variables. A total of 252 classroom teachers, 150 female and 102 male, working in Osmaniye province and its districts in the south of Turkey in the 2022-2023 academic year, participated in the study. In order to determine the demographic characteristics of the participants, the "Personal Information Form" prepared by the researcher and the "Self-Efficacy Perception Scale for Teachers Regarding the Education of Gifted Individuals" consisting of six sub-dimensions developed by Tortop (2014) were used. While analysing the data; frequency and percentage values, independent samples t-test and one-way analysis of variance (ANOVA) were used for the demographic information of the participants. According to the results obtained, no statistically significant difference was found in terms of professional seniority in the self-efficacy levels of classroom teachers towards the education of gifted students. However, it was determined that there was a significant difference in the personality trait sub-dimension in favour of male teachers in terms of gender variable of classroom teachers. It was found that there was a significant difference in the academic and planning sub-dimensions and the total scale in favour of teachers with postgraduate education in terms of the educational status of the classroom teacher. It was found that there was a significant difference in the counselling and planning sub-dimensions of the scale in terms of nominating students to Science and Art Center (SAC). It was found that there was a significant difference in the direction of high self-efficacy in terms of having a student diagnosed as gifted in the classroom, teaching in the support room and receiving in-service training or courses for gifted students. Some suggestions were made by considering the findings obtained as a result of the research.

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Introduction

The concepts of cognition, intelligence and mind have been analysed and defined from different aspects by many experts from past to present. Binet defines intelligence as the ability to make the right decision, the capacity to constantly surpass oneself and good reasoning skills. According to Weschler, intelligence is a mental capacity that includes logical thinking, purposeful behaviour and being in active relationship with the environment (as cited in San Bayhan & Artan, 2005). Samurçay (1983), based on different definitions of intelligence, stated that the following points about intelligence can be taken as a basis: The ability to learn new information quickly; The ability to understand and use the relationships between abstract expressions and symbols; The ability to discover new concepts in a mixed state; The ability to focus ideas on a certain point; The ability to control and criticise different information.

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Intelligence is associated with characteristics such as problem solving ability and easy adaptation to different stimuli. It has been used for hundreds of years to express the general mental capacity of individuals. When the past definitions of the concept of intelligence are analysed, individuals whose intelligence levels are measured and whose general intelligence capacities are above a certain limit are referred to as high intelligence or gifted individuals. The concept of giftedness is not limited to having high potential in general intelligence tests. For this reason, the concept of "gifted" is preferred today instead of "gifted" (Özbay, 2013).

The concept of giftedness has been defined differently from past to present and different approaches have been obtained as a result. Terman (1925) defined giftedness as the top 2% of individuals who scored the highest in standard intelligence tests applied to individuals. It was observed that Terman used only intelligence as a criterion to explain giftedness. In the new models proposed in the following periods, the concept of giftedness was analysed in multiple dimensions. One of the first known multi-dimensional models is Renzulli's model. Renzulli's definition of giftedness is one of the most widely accepted definitions today. Renzulli (1986) based giftedness on three basic elements, namely task responsibility, creativity and talent, based on his three-ring model. Another model that defines the concept of giftedness is Tannenbaum's (1986) starfish model. According to the starfish model, a person must have five factors in order to be gifted. Each factor is not sufficient on its own; in other words, the combination of four factors does not make sense without the fifth factor. The five factors in Tannenbaum's starfish model are: luck, special talent, general talent, non-intellectual (non-intelligence-related) characteristics and environmental factors (as cited in Sürmeli, 2015). When different approaches to giftedness are analysed, it is seen that at first only intelligence was taken as a criterion, but as we get closer to the present day, other factors are also mentioned. Apart from intelligence, it can be said that one of the factors that should be emphasised is education. In order for gifted individuals to receive appropriate education, they must first be diagnosed.

In the identification of gifted students in Turkey, the application and nomination process, testing of the nominated individuals, and making decisions about the individuals according to the test results are followed in order (Sak, 2010). In the identification process of gifted students in Turkey, the principles specified in the Science and Art Centres Directive are taken into consideration. Science and Art Centres (SAC) are the most common institutions providing education to gifted individuals. In these institutions, it is aimed to provide services to gifted individuals outside the school hours within the framework of the determined programme (Kaya, 2013). The Ministry of National Education of Türkiye (MoNET) determines the grade level and age of identification of the candidates. Considering these criteria, students who are thought to be gifted in at least one of the areas of music, visual arts and general mental ability are nominated in accordance with the published guidelines (MoNET, 2016). Teachers have a great role in the correct nomination of gifted students and the effectiveness of the education to be given to them.

Since it is important for gifted children to be recognised at an early age and educated in line with their abilities in order for them to become people who are beneficial to society, the characteristics that classroom teachers should have come to the fore. Classroom teacher can be defined as a person who transfers the achievements of the subjects in the education programmes in primary schools to children and supports children's sociable, creative, research-loving, positive attitudes towards themselves and the environment they live in, and their ability to communicate well with others (Tok & Bozkurt, 2010). Teachers who will teach gifted students should have richer imagination and be more talented individuals than other teachers (Lewis, 1982). The characteristics that classroom teachers should have can be classified under two headings as "personality and professional" characteristics (Şahin, 2012). Personality characteristics of teachers can be listed as being patient and a good listener, having a strong sense of self, being aware of the interests and needs of students, supporting the development of the child, motivating the student for learning, being open to criticism, having the ability to work systematically, making an effort to keep the student active in the learning process, reacting consistently to the events encountered, looking at the events holistically and without prejudice (Dağlıoğlu & Metin, 2004; Sak, 2010). Professional characteristics of teachers can be listed as having a good command of teaching methods and techniques, knowing the concepts of giftedness, recognising the affective characteristics of gifted children, and having the potential to maximise students' thinking skills (Chan, 2001; Dağlıoğlu & Metin, 2004; Sak,

2010). The fact that classroom teachers have adequate professional equipment directly affects their self-efficacy in the education of gifted children.

Bandura (1986) defines self-efficacy as an individual's judgement about the level of successful realisation of the related activities by planning in order to reach a certain level of success. Bandura (1994) bases self-efficacy on four interrelated basic knowledge. These are: performance achievements, emotional state, indirect experiences as a result of others' experiences and verbal persuasion. Bandura (1995) states that the most effective of these four basic knowledge is performance achievements. The success obtained as a result of the individual's experience motivates his/her future behaviours positively. Based on the results of the research, it is possible to say that teachers with high self-efficacy levels successfully carry out activities in the education process (Kiremit, 2006).

It is seen that there are many studies on teachers' self-efficacy. In their study, Korkut and Babaoğlu (2012) found that self-efficacy of classroom teachers can differ according to gender and school location. Similarly, it is among the studies that there are significant differences in teachers' self-efficacy on issues such as technology acceptance and professional seniority (Aktürk & Delen, 2020). Barni, Danioni, and Benevene (2019) showed in their study that teachers' conservation values have a positive relationship with the sense of self-efficacy regardless of the type and level of motivation to teach, and they found that the relationships between openness to change and self-efficacy, as well as altruism and self-efficacy, vary depending on teachers' motivation. In this context, considering the effect of teachers' self-efficacy on children, it is important to determine what kind of self-efficacy they have towards gifted students.

It is difficult for a teacher to have all of the above-mentioned characteristics. However, the classroom teacher's competence in the subject plays an important role in the correct identification of gifted children and their receiving a good education. In addition to achievement tests, teacher evaluations are taken into consideration in identifying gifted children, because it is unlikely that a classroom teacher will overlook the existence of a gifted child who is working below his/her potential. Teachers are in a position to observe certain behavioural correlates of intellectual giftedness in their daily interactions with children (Borland, 1978). As of the 2021-2022 academic year, the Ministry of National Education of Türkiye has regulated the number of nominations for gifted students to be 20% of the student body. This situation reveals the importance of the nomination process of gifted students to SAC, which is the first step of the identification phase of gifted students, and the competencies of classroom teachers who carry out their basic education on gifted students.

Although classroom teachers are important elements in the identification and education of gifted children, there is not much research on whether they have sufficient potential for gifted education, which reveals the importance of conducting this study. In this study, which aims to examine the self-efficacy levels of classroom teachers towards gifted education in terms of different variables, answers to the following questions were sought;

- Do classroom teachers' self-efficacy towards gifted education differ significantly in terms of gender, professional seniority, faculty of graduation and educational status?
- Classroom teachers' self-efficacy towards gifted students' education at nominating of students to Science and Art Centre (SAC)?
- There are students diagnosed as gifted in the class or teaching in the support education room
- Is there a significant difference in terms of participation in in-service training or any course?

Method

Research Model

In this research, quantitative research method was used. In the research, relational screening was applied in order to determine the self-efficacy levels of classroom teachers and to reveal their relationships with various variables. The survey model is a research model that aims to determine a situation that has existed in the past or currently exists by describing it as it exists (Karasar, 2012).

Sampling

The population of the study is the classroom teachers working in Osmaniye province in the south of Turkey in the 2022-2023 academic year. A total of 252 classroom teachers, 150 female and 102 male, were selected from the population by random sampling method. In this type of sampling, all units in the population have an independent and equal probability to be selected for sampling (Büyükoztürk et al., 2009). Demographic information of the participants is given in Table 1.

Table 1. Demographic information of the participants

Variable	Demographic Characteristics	Frequency (f)	Percent (%)
Gender	Female	150	59.5
	Male	102	40.5
Professional Seniority (years)	0-10	34	13.5
	11-20	128	50.8
	21 years and over	90	35.7
Graduated Faculty	Faculty of Education	226	89.7
	Other	26	10.3
Education Status	Undergraduate education	190	75.4
	Postgraduate education	62	24.6
Nomination status for SAC	At least one of the candidates won	104	41.3
	There were no winners among the candidates	103	40.9
	I did not nominate	45	17.9
The presence of gifted students in the class	Yes	40	15.9
	No	212	84.1
Providing courses to gifted students in the support education room	Yes	31	12.3
	No	221	87.7
Receiving in-service training or courses related to gifted students	Yes	80	31.7
	No	172	68.3

When Table 1 is analysed, it is seen that 59,5% of the classroom teachers are female in terms of gender. It is seen that the participants' seniority range is mostly between 11-20 (50,8%) years. According to the type of faculty graduated, it is seen that most of the graduates are education faculty graduates (89,7%). According to the educational status, it is seen that most of the graduates are bachelor's degree graduates (75,4%). According to the status of nominating a candidate for Bilsem; "I nominated, won 41.3%", "I nominated, did not win 40.9%", "I did not nominate 17.9%". 84.1% of the answers to the question of having gifted students in their class were no. 87,7% of the answers to the question about giving courses to gifted students in the support education room were no. It was concluded that 68,3% of the answers to the question of receiving in-service training or courses related to gifted students were no.

Data Collection Tools

The data were collected through Google Forms and the personal information form prepared by the researcher and the Self-Efficacy Scale for Gifted Education were used. In the personal information form, there are questions designed to collect information about classroom teachers' gender, professional seniority, graduated faculty, educational status, nomination to Science and Art Centres, whether there are gifted students in their class, in-service training and courses related to gifted education.

Self-Efficacy Scale for Gifted Education

The scale used to collect data in the study will be used to determine the self-efficacy of classroom teachers regarding the education of gifted students. This scale adapted and developed by Tortop (2014) consists of 26 items and six sub-dimensions. Factor analyses were performed on the scale and reliability coefficients were determined for sub-dimensions and the whole scale. The Cronbach Alpha reliability coefficients for the sub-dimensions and the whole adapted scale are as follows; Academic Qualification 0,86, Mentorship Qualification 0,93, Responsibility 0,77,

Personality Traits 0,91, Creativity Fostering Qualification 0,94, Instructional Planning Qualification 0,94 and 0,90 for the whole scale.

Data Analyses

The normality distributions of the scale filled out by the classroom teachers to determine their self-efficacy towards gifted education and the descriptive statistics of the scale are analysed in Table 2.

Table 2. Normality distributions and descriptive statistics distributions for the scale

Sub-factors	N	Min.	Mak.	Mod	Med.	\bar{X}	S	Skewness	Kurtosis
Academic Qualification	252	1	5	3	3	3.08	1.02	.022	-.628
Mentorship Qualification	252	1	5	3	3.25	3.12	1.03	-.163	-.534
Responsibility	252	1	5	3	3.33	3.25	.91	.061	-.289
Personality Traits	252	2.57	5	4	4	4	.64	-.211	-.751
Creativity Fostering Qualification	252	1.67	5	4	4	3.96	.72	-.412	-.144
Instructional Planning Qualification	252	1	5	4	3.66	3.57	.90	-.340	-.397
Scale Total	252	1.88	5	3.77	3.65	3.61	.67	-.110	-.348

When the normality distributions and descriptive statistics results of the responses of the classroom teachers to the scale were examined, it was found that the skewness and kurtosis scores showed a normal distribution between the limits accepted as normal between +1.50 and -1.50 (Tabachnick & Fidell, 2007). In line with the collected data, t Test was performed for two independent variables and One-Way Analysis of Variance was performed for more than two independent variables, and in case the variance analysis was significant, pairwise comparisons were checked with Post-Hoc: Bonferroni test was used.

Findings

Whether the scores of classroom teachers' self-efficacy scale and subscales related to gifted education differed according to gender was analysed by t-test and the results are presented in Table 3.

Table 3. T-test analysis results of classroom teachers' scale scores according to gender

Sub-factors	Gender	N	\bar{X}	S	Sd	t	p																																																																				
Academic Qualification	Female	150	3.06	1.04	250	-.389	.698																																																																				
	Male	102	3.11	.99				Mentorship Qualification	Female	150	3.11	1.06	250	-.277	.782	Male	102	3.14	1	Responsibility	Female	150	3.26	.91	250	.341	.733	Male	102	3.22	.91	Personality Traits	Female	150	3.93	.67	250	-2.097	.037*	Male	102	4.10	.58	Creativity Fostering Qualification	Female	150	3.93	.73	250	-.916	.361	Male	102	4.01	.70	Instructional Planning Qualification	Female	150	3.50	.97	250	-1.451	.287	Male	102	3.67	.80	Scale Total	Female	150	3.58	.70	250	-1.066	.932
Mentorship Qualification	Female	150	3.11	1.06	250	-.277	.782																																																																				
	Male	102	3.14	1				Responsibility	Female	150	3.26	.91	250	.341	.733	Male	102	3.22	.91	Personality Traits	Female	150	3.93	.67	250	-2.097	.037*	Male	102	4.10	.58	Creativity Fostering Qualification	Female	150	3.93	.73	250	-.916	.361	Male	102	4.01	.70	Instructional Planning Qualification	Female	150	3.50	.97	250	-1.451	.287	Male	102	3.67	.80	Scale Total	Female	150	3.58	.70	250	-1.066	.932	Male	102	3.67	.62								
Responsibility	Female	150	3.26	.91	250	.341	.733																																																																				
	Male	102	3.22	.91				Personality Traits	Female	150	3.93	.67	250	-2.097	.037*	Male	102	4.10	.58	Creativity Fostering Qualification	Female	150	3.93	.73	250	-.916	.361	Male	102	4.01	.70	Instructional Planning Qualification	Female	150	3.50	.97	250	-1.451	.287	Male	102	3.67	.80	Scale Total	Female	150	3.58	.70	250	-1.066	.932	Male	102	3.67	.62																				
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	Male	102	4.10	.58				Creativity Fostering Qualification	Female	150	3.93	.73	250	-.916	.361	Male	102	4.01	.70	Instructional Planning Qualification	Female	150	3.50	.97	250	-1.451	.287	Male	102	3.67	.80	Scale Total	Female	150	3.58	.70	250	-1.066	.932	Male	102	3.67	.62																																
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	Male	102	4.01	.70				Instructional Planning Qualification	Female	150	3.50	.97	250	-1.451	.287	Male	102	3.67	.80	Scale Total	Female	150	3.58	.70	250	-1.066	.932	Male	102	3.67	.62																																												
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	Male	102	3.67	.62																																																																							

*p<0.05

When the self-efficacy of classroom teachers towards gifted students was analysed according to their gender, it was found that there was a statistical difference in the personality trait sub-dimension and the personality trait sub-dimension scores of male teachers (\bar{X} =4.10) were higher than the personality trait scores of female teachers (\bar{X} =3.93)

($p < 0.05$). This finding can be interpreted as male teachers' self-efficacy related to personality traits is higher than female teachers.

Whether the scores of the classroom teachers according to their professional seniority differed or not was analysed by ANOVA and the results are given in Table 4.

Table 4. ANOVA results of classroom teachers' scale scores according to professional seniority

Sub-factors	Professional Year	N	\bar{X}	S	Sd	F	p
Academic Qualification	0-10 year ^a	34	3.08	1.02	2-249	.58	.944
	11-20 year ^b	128	3.05	1.04			
	21 year and over ^c	90	3.10	1			
Mentorship Qualification	0-10 year ^a	34	3.18	1	2-249	.395	.674
	11-20 year ^b	128	3.16	1.04			
	21 year and over ^c	90	3.04	1.05			
Responsibility	0-10 year ^a	34	3.50	1.04	2-249	1.622	.200
	11-20 year ^b	128	3.24	.93			
	21 year and over ^c	90	3.17	.81			
Personality Traits	0-10 year ^a	34	4.10	.66	2-249	1.308	.272
	11-20 year ^b	128	4.03	.62			
	21 year and over ^c	90	3.92	.65			
Creativity Fostering Qualification	0-10 year ^a	34	4.13	.73	2-249	1.286	.278
	11-20 year ^b	128	3.97	.74			
	21 year and over ^c	90	3.90	.68			
Instructional Planning Qualification	0-10 year ^a	34	3.75	.94	2-249	1.530	.219
	11-20 year ^b	128	3.60	.92			
	21 year and over ^c	90	3.45	.86			
Scale Total	0-10 year ^a	34	3.74	.72	2-249	1.087	.339
	11-20 year ^b	128	3.63	.68			
	21 year and over ^c	90	3.54	.64			

The Anova test was used to analyse whether the scores of classroom teachers on the Self-Efficacy Scale for Gifted Education and subscales differed according to their professional seniority. As a result of the post-hoc multiple comparison technique "Bonferroni", no significant difference was found ($p > 0.05$).

The t-test was used to analyse whether the scores obtained by the classroom teachers from the scales differed according to their educational status and the results are given in Table 5.

Table 5. T-test Analysis results of teachers' scale scores according to educational background

Sub Factor	Education Status	N	\bar{X}	S	Sd	t	p
Academic Qualification	Undergraduate	190	2,97	1.02	250	-2.801	.005*
	Postgraduate	62	3,39	.95			
Mentorship Qualification	Undergraduate	190	3,06	1.06	250	-1.553	.122
	Postgraduate	62	3,30	.93			
Responsibility	Undergraduate	190	3,21	.94	250	-1.014	.312
	Postgraduate	62	3,35	.80			
Personality Traits	Undergraduate	190	3,96	.67	250	-1.472	.142
	Postgraduate	62	4,10	.53			
Creativity Fostering Qualification	Undergraduate	190	3,92	.75	250	-1.503	.134
	Postgraduate	62	4,08	.60			
Instructional Planning Qualification	Undergraduate	190	3,50	.95	250	-2.134	.034*
	Postgraduate	62	3,78	.72			
Scale Total	Undergraduate	190	3,56	.70	250	-2.098	.037*
	Postgraduate	62	3,77	.55			

* $p < 0.05$

When the self-efficacy of classroom teachers towards gifted students was analysed according to their educational status, it was found that there was a statistical difference in the total, academic and planning sub-dimensions of the scale ($p < 0.05$). It was concluded that the mean scores of postgraduate education were higher than the mean scores of undergraduate education in the total scale and academic and planning sub-dimensions. This can be interpreted as classroom teachers with postgraduate education have higher levels of self-efficacy towards gifted students. In other sub-dimensions of the scale, it was found that there was no significant relationship according to educational status ($p > 0.05$).

The ANOVA test was used to analyse whether the scores obtained by the classroom teachers from the scales differed according to the status of nominating a candidate to BİLSEM and the results are given in Table 6.

Table 6. ANOVA results of teachers' scale scores according to nomination status

Sub-factors	Nomination Status	N	\bar{X}	S	Sd	F	p	Difference
Academic Qualification	At least one of the candidates won ^a	104	3.28	1				
	There were no winners among the candidates ^b	103	2.95	1.05	2-249	3.668	.027	
	Not a candidate ^c	45	2.89	.90				
Mentorship Qualification	At least one of the candidates won ^a	104	3.08	1.02				
	There were no winners among the candidates ^b	103	3.36	1.01	2-249	4.873	.008*	a>b a>c
	Not a candidate ^c	45	2.98	1.12				
Responsibility	At least one of the candidates won ^a	104	2.90	.91				
	There were no winners among the candidates ^b	103	3.28	.91	2-249	.547	.579	
	Not a candidate ^c	45	3.18	.92				
Personality Traits	At least one of the candidates won ^a	104	3.34	.64				
	There were no winners among the candidates ^b	103	4.08	.66	2-249	1.380	.254	
	Not a candidate ^c	45	3.94	.60				
Creativity Fostering Qualification	At least one of the candidates won ^a	104	3.96	.69				
	There were no winners among the candidates ^b	103	4.05	.73	2-249	1.391	.251	
	Not a candidate ^c	45	3.89	.75				
Instructional Planning Qualification	At least one of the candidates won ^a	104	3.93	.89				
	There were no winners among the candidates ^b	103	3.73	.94	2-249	3.269	.040*	a>b
	Not a candidate ^c	45	3.41	.78				
Scale Total	At least one of the candidates won ^a	104	3.56	.68				
	There were no winners among the candidates ^b	103	3.74	.70	2-249	3.078	.048	
	Not a candidate ^c	45	3.52	.53				

* $p < 0.05$

When the self-efficacy of classroom teachers towards gifted students was analysed according to the ANOVA test conducted on the status of having a candidate student in SAC, statistical significance was obtained in the total scale and academic, counselling and planning sub-dimensions ($p < 0.05$). However, as a result of the "Bonferroni Test", which is one of the post-hoc multiple comparison techniques, it was concluded that there was no significant difference between the averages of the variables in the total and academic sub-dimensions of the scale. In the counselling and planning sub-dimensions of the scale, it was seen that there was a difference in favour of at least one of the nominated students winning in the case of teachers nominating students to SAC. From this point of view, it is possible to say that the self-efficacy levels related to counselling and planning dimensions are high according to the status of winning at least one of the students nominated to SAC.

According to the presence of gifted students in the classroom, the t-test was analysed to see whether the scores obtained by the classroom teachers from the scales differed and the results are given in Table 7.

Table 7. T-test results of teachers' scale scores according to the presence of gifted students in the classroom

Sub-factors	Student Presence	n	\bar{X}	S	Sd	t	p																																																																				
Academic Qualification	There is	40	3.78	1.05	250	4.953	.000*																																																																				
	None	212	2.94	.96				Mentorship Qualification	There is	40	3.86	.95	250	5.136	.000*	None	212	2.98	.99	Responsibility	There is	40	3.35	.97	250	.797	.426	None	212	3.23	.90	Personality Traits	There is	40	4.39	.53	250	4.350	.000*	None	212	3.92	.63	Creativity Fostering Qualification	There is	40	4.42	.57	250	4.460	.000*	None	212	3.88	.71	Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*	None	212	3.46	.89	Scale Total	There is	40	4.09	.60	250	5.146	.000*
Mentorship Qualification	There is	40	3.86	.95	250	5.136	.000*																																																																				
	None	212	2.98	.99				Responsibility	There is	40	3.35	.97	250	.797	.426	None	212	3.23	.90	Personality Traits	There is	40	4.39	.53	250	4.350	.000*	None	212	3.92	.63	Creativity Fostering Qualification	There is	40	4.42	.57	250	4.460	.000*	None	212	3.88	.71	Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*	None	212	3.46	.89	Scale Total	There is	40	4.09	.60	250	5.146	.000*	None	212	3.52	.65								
Responsibility	There is	40	3.35	.97	250	.797	.426																																																																				
	None	212	3.23	.90				Personality Traits	There is	40	4.39	.53	250	4.350	.000*	None	212	3.92	.63	Creativity Fostering Qualification	There is	40	4.42	.57	250	4.460	.000*	None	212	3.88	.71	Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*	None	212	3.46	.89	Scale Total	There is	40	4.09	.60	250	5.146	.000*	None	212	3.52	.65																				
Personality Traits	There is	40	4.39	.53	250	4.350	.000*																																																																				
	None	212	3.92	.63				Creativity Fostering Qualification	There is	40	4.42	.57	250	4.460	.000*	None	212	3.88	.71	Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*	None	212	3.46	.89	Scale Total	There is	40	4.09	.60	250	5.146	.000*	None	212	3.52	.65																																
Creativity Fostering Qualification	There is	40	4.42	.57	250	4.460	.000*																																																																				
	None	212	3.88	.71				Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*	None	212	3.46	.89	Scale Total	There is	40	4.09	.60	250	5.146	.000*	None	212	3.52	.65																																												
Instructional Planning Qualification	There is	40	4.12	.79	250	4.340	.000*																																																																				
	None	212	3.46	.89				Scale Total	There is	40	4.09	.60	250	5.146	.000*	None	212	3.52	.65																																																								
Scale Total	There is	40	4.09	.60	250	5.146	.000*																																																																				
	None	212	3.52	.65																																																																							

*p<0.05

When the self-efficacy of classroom teachers towards gifted students was analysed according to the presence of gifted children in their classes, it was found that there was a statistical difference ($p < 0.05$). Accordingly, when it was examined between which two situations, it was found that the self-efficacy scores of teachers who had gifted students in their class were statistically significantly higher in all dimensions except the responsibility dimension ($p > 0.05$).

The t-test was analysed to see whether the classroom teachers' scores on the scales differed according to whether they provided courses in the support education room for students diagnosed with giftedness, and the results are given in Table 8.

Table 8. T-test Results of the scores of teachers' providing courses to students diagnosed with giftedness in the support education room

Sub-factors	Gender	N	\bar{X}	S	Sd	t	p																																																																				
Academic Qualification	Yes	31	3.63	1.15	250	3.280	.001*																																																																				
	No	221	3.00	.98				Mentorship Qualification	Yes	31	3.71	1.10	250	3.466	.001*	No	221	3.04	1.00	Responsibility	Yes	31	3.20	.99	250	-.314	.754	No	221	3.25	.90	Personality Traits	Yes	31	4.25	.62	250	2.323	.021*	No	221	3.96	.64	Creativity Fostering Qualification	Yes	31	4.19	.76	250	1.852	.065	No	221	3.93	.71	Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*	No	221	3.51	.89	Scale Total	Yes	31	3.93	.74	250	2.790	.006*
Mentorship Qualification	Yes	31	3.71	1.10	250	3.466	.001*																																																																				
	No	221	3.04	1.00				Responsibility	Yes	31	3.20	.99	250	-.314	.754	No	221	3.25	.90	Personality Traits	Yes	31	4.25	.62	250	2.323	.021*	No	221	3.96	.64	Creativity Fostering Qualification	Yes	31	4.19	.76	250	1.852	.065	No	221	3.93	.71	Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*	No	221	3.51	.89	Scale Total	Yes	31	3.93	.74	250	2.790	.006*	No	221	3.57	.65								
Responsibility	Yes	31	3.20	.99	250	-.314	.754																																																																				
	No	221	3.25	.90				Personality Traits	Yes	31	4.25	.62	250	2.323	.021*	No	221	3.96	.64	Creativity Fostering Qualification	Yes	31	4.19	.76	250	1.852	.065	No	221	3.93	.71	Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*	No	221	3.51	.89	Scale Total	Yes	31	3.93	.74	250	2.790	.006*	No	221	3.57	.65																				
Personality Traits	Yes	31	4.25	.62	250	2.323	.021*																																																																				
	No	221	3.96	.64				Creativity Fostering Qualification	Yes	31	4.19	.76	250	1.852	.065	No	221	3.93	.71	Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*	No	221	3.51	.89	Scale Total	Yes	31	3.93	.74	250	2.790	.006*	No	221	3.57	.65																																
Creativity Fostering Qualification	Yes	31	4.19	.76	250	1.852	.065																																																																				
	No	221	3.93	.71				Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*	No	221	3.51	.89	Scale Total	Yes	31	3.93	.74	250	2.790	.006*	No	221	3.57	.65																																												
Instructional Planning Qualification	Yes	31	3.95	.95	250	2.543	.012*																																																																				
	No	221	3.51	.89				Scale Total	Yes	31	3.93	.74	250	2.790	.006*	No	221	3.57	.65																																																								
Scale Total	Yes	31	3.93	.74	250	2.790	.006*																																																																				
	No	221	3.57	.65																																																																							

*p<0.05

When the self-efficacy of classroom teachers towards gifted students was analysed according to the teachers' giving courses to students diagnosed with giftedness in the support education room, a statistical difference was found in the total scale and Academic, Counselling, Personality Traits, and Planning dimensions ($p < 0.05$). According to this result, it was found that the scores of the teachers who gave courses to the students diagnosed with giftedness in the support education room were significantly higher than the other teachers.

The t-test was used to analyse whether the scores of the classroom teachers on the scales differed according to whether they received in-service training or courses on giftedness and the results are given in Table 9.

Table 9. T-test results of the scores of teachers' receiving in-service training or courses for gifted students

Sub-factors	Receiving Training	N	\bar{X}	S	Sd	t	p																																																																				
Academic Qualification	Yes	80	3.65	.96	250	6.557	.000*																																																																				
	No	172	2.81	.93				Mentorship Qualification	Yes	80	3.68	.91	250	6.297	.000*	No	172	2.86	.99	Responsibility	Yes	80	3.38	.86	250	1.602	.110	No	172	3.18	.93	Personality Traits	Yes	80	4.25	.54	250	4.443	.000*	No	172	3.88	.65	Creativity Fostering Qualification	Yes	80	4.20	.61	250	3.531	.000*	No	172	3.86	.74	Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*	No	172	3.39	.91	Scale Total	Yes	80	3.95	.59	250	5.671	.000*
Mentorship Qualification	Yes	80	3.68	.91	250	6.297	.000*																																																																				
	No	172	2.86	.99				Responsibility	Yes	80	3.38	.86	250	1.602	.110	No	172	3.18	.93	Personality Traits	Yes	80	4.25	.54	250	4.443	.000*	No	172	3.88	.65	Creativity Fostering Qualification	Yes	80	4.20	.61	250	3.531	.000*	No	172	3.86	.74	Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*	No	172	3.39	.91	Scale Total	Yes	80	3.95	.59	250	5.671	.000*	No	172	3.46	.65								
Responsibility	Yes	80	3.38	.86	250	1.602	.110																																																																				
	No	172	3.18	.93				Personality Traits	Yes	80	4.25	.54	250	4.443	.000*	No	172	3.88	.65	Creativity Fostering Qualification	Yes	80	4.20	.61	250	3.531	.000*	No	172	3.86	.74	Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*	No	172	3.39	.91	Scale Total	Yes	80	3.95	.59	250	5.671	.000*	No	172	3.46	.65																				
Personality Traits	Yes	80	4.25	.54	250	4.443	.000*																																																																				
	No	172	3.88	.65				Creativity Fostering Qualification	Yes	80	4.20	.61	250	3.531	.000*	No	172	3.86	.74	Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*	No	172	3.39	.91	Scale Total	Yes	80	3.95	.59	250	5.671	.000*	No	172	3.46	.65																																
Creativity Fostering Qualification	Yes	80	4.20	.61	250	3.531	.000*																																																																				
	No	172	3.86	.74				Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*	No	172	3.39	.91	Scale Total	Yes	80	3.95	.59	250	5.671	.000*	No	172	3.46	.65																																												
Instructional Planning Qualification	Yes	80	3.95	.78	250	4.681	.000*																																																																				
	No	172	3.39	.91				Scale Total	Yes	80	3.95	.59	250	5.671	.000*	No	172	3.46	.65																																																								
Scale Total	Yes	80	3.95	.59	250	5.671	.000*																																																																				
	No	172	3.46	.65																																																																							

*p<0.05

When the self-efficacy of classroom teachers towards gifted students was analysed according to the teachers' education status, it was found that there was a statistical difference ($p < 0.05$). Accordingly, when it was examined between which two situations there was a difference, it was found that the scores of the teachers who received training in all dimensions except the Responsibility dimension ($p > 0.05$) were statistically significantly higher.

Conclusion and Discussion

Since teachers' sense of efficacy is related to students' success, it is important to determine how teachers with different levels of efficacy behave in the classroom. Such data are important in terms of revealing the differences between teachers and the role of these differences in student achievement (Dembo & Gibson, 1985). Teachers with high level of self-efficacy take individual differences of students into consideration while planning the teaching process. Individuals who exhibit a high level of performance compared to their peers and have a strong sense of creativity are defined as gifted (Renzulli & Delcourt, 1986). As can be understood from the definition, gifted students differ from their peers. Self-efficacy of classroom teachers in the education and identification of gifted students who show different characteristics from their peers is important. In this study, the self-efficacy of classroom teachers working at the first level of basic education towards the education of gifted students was analysed in terms of different variables.

In this study, when the self-efficacy of classroom teachers regarding the education of gifted students was examined in terms of gender, it was concluded that there was a differentiation in favour of men in the personality trait sub-dimension. When the literature was examined, it was found that different results were reached and that there was no significant difference between the attitudes and self-efficacy of classroom teachers towards gifted students and the gender variable (Güneş, 2015; Dinçer, 2019), as well as research findings (Girgin & Şahin, 2019; Vatansever Bayraktar, Kadioğlu Ateş & Afat 2019; Yıldız, 2020) showing that male teachers' self-efficacy for the education of gifted students is higher than female teachers. In another study, it was concluded that women's self-efficacy levels in Mentoring and Responsibility dimensions were statistically significantly higher than men (Abanoz, 2021). According to the literature, it is understood that there are studies that overlap and do not overlap with the results of these research findings. This situation shows that there is a need for more research on the subject.

In the study, it was observed that the self-efficacy of classroom teachers regarding the education of gifted students did not differ in terms of professional seniority. Yıldız (2020) found no difference in classroom teachers' self-efficacy beliefs towards gifted education in terms of professional seniority. Abanoz (2021) concluded that teachers between the ages of 20-29 were more conscious about the education of gifted students than teachers aged 50 and over. In Sürmeli's (2015) study, it was found that teachers with professional experience over the age of 40 had a lower level of awareness about giftedness than their other colleagues. There are studies suggesting that awareness of gifted students increases with increasing seniority in the profession (İnan, Bayındır, & Demir, 2009; Şayir 2015). It can be thought that the

different results in the studies may be caused by situations such as the trainings given in universities on these issues recently due to the increase in awareness of gifted students, the level of awareness of young teachers by doing more research on gifted students, and the increasing professional experience due to the increase in years of service.

When the educational status of classroom teachers was analysed in terms of their self-efficacy, it was found that there was a statistical difference in the total, academic and planning sub-dimensions of the scale. In Abanoz's (2021) study, a significant result was found between teachers' self-efficacy and their educational status. At the end of the study, it was concluded that teachers with postgraduate degrees nominated students to BİLSEM at a higher rate than teachers with undergraduate degrees, and the rate of winning BİLSEM among the candidates they nominated was higher than the undergraduate level. Similarly, Karahan and Balat (2011) found that there was a differentiation in teachers' professional self-efficacy according to their educational levels. The results of the study may be due to the fact that the postgraduate education of the teachers may create awareness about gifted students and they may be able to distinguish gifted students from others more easily due to their characteristics.

A significant difference was found in the counselling and planning sub-dimensions of the scale between the self-efficacy levels of classroom teachers towards gifted students and the status of nominating students to SAC. This difference was found to be in favour of the teachers' winning at least one of the students nominated to SAC. While collecting data, the items of the nomination variable were "I nominated at least one of the students won, I nominated no winner, and I was not nominated". In Abanoz's (2021) study, a statistically positive significant relationship was found between the total scale and the dimensions of Encouraging Creativity, Appropriate Personality Traits, Academic Competence and Mentoring. Akar and Uluman (2013) found that the rate of classroom teachers who correctly nominated gifted individuals was 18%, while this rate was 31.3% in Abanoz's (2021) study. This can be interpreted as an increase in the level of classroom teachers' correct nomination over time. Based on this, it can be concluded that classroom teachers' self-efficacy on giftedness can be associated with the process of nominating students to SAC. Thus, it is estimated that classroom teachers who nominate students have a high level of awareness about giftedness.

When the self-efficacy of teachers with gifted students in their classrooms was examined compared to teachers without gifted students in their classrooms, a statistically highly significant relationship was found in favour of teachers with gifted students in their classrooms in all dimensions except the Responsibility dimension. This result supports the findings of similar studies (Şayir, 2015; Abanoz, 2021). Starko and Schack (1989) found that there were differences in the self-efficacy of teachers with gifted students in their classrooms and interpreted this result as both the experience of working with gifted children and the increased interest in the needs of these students.

Classroom teachers' giving courses to students diagnosed with giftedness in the support education room was found to be statistically significant in all dimensions except for the sub-dimensions of responsibility and encouraging creativity. Afat (2017), based on the fact that 2% of the population is gifted, stated that the proportion of this group receiving education in the support room in the province where the research was conducted was below 1%. In addition, it was stated that only 44% of the students with enrichment measures were given education in the support room by the Guidance Research Centre. In this study, it was observed that 12.3% of the classroom teachers who gave courses in the support education room to students diagnosed with giftedness. This low rate may have been caused by various reasons such as the fact that classroom teachers and student parents did not know that gifted students could be given courses in the support education room, the lack of adequate infrastructure in schools, the lack of documents such as enriched education plans and printed resources, and the inadequate wages of the teachers who would give courses. As a result, it is thought that it may be useful to include dissemination studies on support education rooms and activities that will increase the competencies of teachers in this regard.

When the self-efficacy of classroom teachers towards gifted students was analysed according to the status of receiving in-service training and courses, it was concluded that teachers who received training in all dimensions of the scale except the responsibility dimension were statistically highly significant. Copenhaver and McIntyre (1992) stated in their study that teachers' participation in in-service trainings about gifted students can give them positive attitudes.

Tortop and Dinçer (2016) stated in their study that in-service trainings are important for understanding gifted students. Similarly, Kaya and Ataman (2017) emphasised that in-service trainings should be provided to understand gifted students. Based on the results obtained, it is estimated that classroom teachers' in-service training and course taking may create positive awareness about gifted students' self-efficacy.

The results showed that classroom teachers' postgraduate education, having gifted students in their classrooms, giving courses to students diagnosed with giftedness in the support education room, and receiving in-service training and courses for gifted students were positively related to their self-efficacy level. Currently, the fact that the Ministry of National Education requires 20% of primary school 1st, 2nd and 3rd grade students to be nominated in the process of nomination to SAC, the educational status and experiences of classroom teachers gain importance in identifying the right candidates in the nomination process. Providing support to classroom teachers to increase their knowledge and experience about gifted students will ensure that the process of selecting candidates for SAC is operated correctly and that gifted students receive education in line with their talents.

References

- Abanoz, S. G. (2021). *Üstün yetenekli öğrencisi olan ile olmayan sınıf öğretmenlerinin üstün yetenekli eğitimine ilişkin öz yeterlikleri ve tutumlarının karşılaştırılması* (Comparison of classroom teachers with and without gifted students' self-efficacy and attitudes towards gifted education). Unpublished master thesis, Kırklareli University, Kırklareli.
- Afat, N. (2017). *Üstün zekalı ve özel yetenekli bireylerin eğitiminde destek eğitim odalarının incelenmesi* (Investigation of support education rooms in the education of gifted and talented individuals). *Social Science Studies*, 5(9), 294-303.
- Akar, İ. & Uluman, M. (2013). Sınıf öğretmenlerinin üstün yetenekli öğrencileri doğru aday gösterme durumları (Classroom teachers' nomination of gifted students correctly). *Üstün Yetenekliler Eğitimi Araştırmaları Dergisi*, 1(3), 199-212.
- Aktürk, A. O., & Delen, A. (2020). Öğretmenlerin teknoloji kabul düzeyleri ile öz-yeterlik inançları arasındaki ilişki (The relationship between teachers' technology acceptance levels and their self-efficacy beliefs). *Bilim Eğitim Sanat ve Teknoloji Dergisi*, 4(2), 67-80.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.). *Encyclopedia of Human Behaviour*, 71-78. www.des.emory.edu/mfp/BanEncy.html
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.). *Self-Efficacy in Changing Societies*. Cambridge University Press, 1-45.
- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in psychology*, 10, 1645.
- Borland, J. (1978). Teacher identification of the gifted: A new look. *Journal for the Education of the Gifted*, 2(1), 22-32. <https://doi.org/10.1177/016235327800200104>
- Büyüköztürk, Ş., Çakmak, E.K., Akgün, Ö.E., Karadeniz Ş. & Demirel, F. (2009). *Bilimsel Araştırma Yöntemleri (Scientific Research Methods)*. Ankara: Pegem Akademi.
- Chan, D. W. (2001). Characteristics and competencies of teachers of gifted learners: The Hong Kong teacher perspective. *Roepers Review*, 23(4), 197-202.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Routledge.
- Copenhaver, R. W. & McIntyre, D. J. (1992). Teachers' perceptions of gifted students. *Roepers Review*, 14, 151-153.
- Dağlıoğlu, E., ve Metin, N. (2004). Üstün yetenekli çocukların eğitiminde öğretmenlerin rolü (The role of teachers in the education of gifted children). Şirin, M., R., Kulaksızoğlu A, ve Bilgili A., E.,(Edt). I. *Türkiye üstün yetenekli çocuklar kongresi bildiriler kitabı (I. Turkey congress of gifted children proceedings book)*, 170-179.
- Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal*, 86(2), 173-184.
- Dinçer, S. (2019). Investigation of the Gifted Education Self-Efficacy of Teachers Work with Gifted Students. *Journal of Gifted Education and Creativity*, 6(3), 167-174.
- Girgin, D.,& Şahin, Ç. (2019). Öğretmen Adaylarının Üstün Yetenekli Öğrencilere İlişkin Özyeterlilik Düzeylerinin Bazı Değişkenler Açısından İncelenmesi (Investigation of Prospective Teachers' Self-Efficacy Levels Regarding Gifted Students in Terms of Some Variables). *The Journal of Limitless Education and Research*, 4(2), 143-166.
- Güneş, A. (2015). Sınıf öğretmenlerinin üstün yetenekliler eğitimine ilişkin tutum ve öz-yeterliliklerinin incelenmesi (Investigation of classroom teachers' attitudes and self-efficacy towards gifted education). *Journal of Gifted Education and Creativity*, 2(1), 12-16.
- İnan, H., Z., Bayındır, N. & Demir, S (2009). Awareness level of teachers about the characteristics of gifted children. *Australian Journal of Basic And Applied Sciences*, 3, 2519-2527.

- Karahan, Ş., & Balat, G. U. (2011). Özel eğitim okullarında çalışan eğitimcilerin öz-yeterlik algılarının ve tükenmişlik düzeylerinin incelenmesi (Investigation of self-efficacy perceptions and burnout levels of educators working in special education schools). *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 29(29), 1-14.
- Karasar, N. (2012). *Bilimsel araştırma yöntemi (Scientific research method)*. Ankara: Nobel Yayın Dağıtım.
- Kaya, N. (2013). Üstün yetenekli öğrencilerin eğitimi ve BİLSEM'ler (Education of gifted students and BİLSEM's) *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 15(1), 115-122.
- Kaya, N. G., & Ataman, A. (2017). Üstün yetenekli öğrencilerin istenmeyen davranışlarına yönelik öğretmenlerin eğitim ihtiyaçlarının belirlenmesi (Determining the training needs of teachers for the undesired behaviours of gifted students.). *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*, 37(3), 835-853.
- Kiremit, H. (2006). Fen bilgisi öğretmenliği öğrencilerinin biyoloji ile ilgili öz- yeterlik inançlarının karşılaştırılması (Comparison of science teacher education students' self-efficacy beliefs about biology). Unpublished doctoral thesis, Dokuz Eylül University, İzmir.
- Korkut, K., & Babaoğlu, E. (2012). Sınıf öğretmenlerinin öz yeterlik inançları (Self-efficacy beliefs of classroom teachers). *Uluslararası Yönetim İktisat ve İşletme Dergisi*, 8(16), 269-281.
- Lewis, J. F. (1982). Bulldozers or chairs? Gifted students describe their ideal teacher. *G/C/T*, 5(3), 16-19.
- Matheis, S., Kronborg, L., Schmitt, M., & Preckel, F. (2017). Threat or challenge? Teacher beliefs about gifted students and their relationship to teacher motivation. *Gifted and Talented International*, 32(2), 134-160.
- Milli Eğitim Bakanlığı (Ministry of National Education of Türkiye) (2016). *Bilim ve Sanat Merkezleri Yönergesi (Science and Art Centres Directive)*. https://orgm.meb.gov.tr/meb_iys_dosyalar/2016_10/07031350_bilsem_yonergesi.pdf
- Özbay, Y. (2013). Üstün yetenekli çocuklar ve aileleri (Gifted children and their families). Ankara: T.C. Aile ve Sosyal Politikalar Bakanlığı Aile ve Toplum Hizmetleri Genel Müdürlüğü Yayını.
- Renzulli, J. S., & Delcourt, M. A. (1986). The legacy and logic of research on the identification of gifted persons. *Gifted Child Quarterly*, 30(1), 20-23.
- Sak, U. (2010). *Üstün Zekalılar Özellikleri Tanılanmaları Eğitimleri (Giftedness Characteristics Identification and Education)*. Ankara: Maya Akademi.
- Samurçay, N. (1983). Zekâ ve yaratıcılık (Intelligence and creativity). *Eğitim ve Bilim*, 8(45), 4-12.
- San Bayhan, P. & Artan, İ. (2005). Çocuk gelişimi ve eğitimi (Child development and education). İstanbul: Morpa Kültür Yayınları.
- Starko, A. J., & Schack, G. D. (1989). Perceived Need, Teacher Efficacy, and Teaching Strategies for the Gifted and Talented. *Gifted Child Quarterly*, 33(3), 118-122. <https://doi.org/10.1177/001698628903300305>
- Sürmeli, V. (2015). *Sınıf öğretmenlerinin üstün yetenekli öğrenciler hakkındaki farkındalık düzeyleri (Classroom teachers' level of awareness about gifted students)*. Unpublished master thesis, İstanbul Gelişim University, İstanbul.
- Şahin, F. (2012). *Sınıf öğretmenlerinin üstün yetenekli öğrenciler ve özellikleri hakkında bilgi düzeylerini arttırmaya yönelik eğitim programının etkililiği (The effectiveness of the training programme to increase classroom teachers' knowledge about gifted students and their characteristics)*. Unpublished master thesis, Ankara University, Ankara.
- Şayir, T. (2015). *Üstün yetenekli çocuklara ilişkin sınıf öğretmenlerinin bilgi düzeylerini incelenmesi (Investigating the level of knowledge of classroom teachers about gifted children)*. Unpublished master thesis, Yıldız Technical University, İstanbul.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5, pp. 481-498). Boston, MA: pearson.
- Tok, H., & Bozkurt, A. (2010). Sınıf öğretmenlerinin 1. 2. 3. sınıflar için ayrı ve 4. 5. sınıflar için ayrı yetiştirilmeleri konusunda sınıf öğretmenlerinin görüşlerinin değerlendirilmesi (Evaluation of the opinions of classroom teachers on the training of classroom teachers separately for 1st, 2nd, 3rd and 4th, 5th grades). *Gaziantep University Journal of Social Sciences*, 9(3).
- Tortop, H. S. (2014). Examining the effectiveness of the in-service training program for the education of the academically gifted students in Turkey: A case study. *Journal for the Education of Gifted Young Scientists*, 2(2), 67-86.
- Tortop, H. S., & Dinçer, S. (2016). Opinions of Classroom Teachers Working with Gifted Students in Support Training Rooms. *Journal of Gifted Education Research*, 4(2), 11-28.
- Vatansever Bayraktar, H., Kadioğlu Ateş, H., & Afat, N. (2019). An analysis on the relationship between primary school teachers' self-efficacy beliefs and attitudes towards gifted education. *International Journal of Eurasia Social Sciences*, 10(28), 1099-1124
- Yıldız, A. (2020). Sınıf Öğretmenlerinin Üstün Yetenekli Öğrencilerin Eğitimine Yönelik Tutum, Öz-Yeterlik ve Eğitim İhtiyaçlarının Belirlenmesi (Determination of Attitudes, Self-Efficacy and Training Needs of Classroom Teachers towards the Education of Gifted Students). *Turkish Studies-Educational Sciences*, 15(1), 417-430.